REMARKS/ARGUMENTS

After the foregoing amendment, Claims 1-25 are currently pending in this

application. Claims 1-12 have been amended. New claims 13-25 have been added.

In the specification, the title has been amended. Applicants submit that no new

matter has been introduced into the application by these amendments.

Allowable Subject Matter

The Examiner is thanked for indicating that claims 5-7 and 11 contain

allowable subject matter.

Claim Objections

The Examiner objected to claims 1, 2 and 10 because of informalities. The

objected to claims have been amended to correct the informalities. Withdrawal of

the objection to claims 1, 2 and 10 is respectfully requested.

Claim Rejections - 35 USC §112

Claims 8, 9, and 12 stand rejected under 35 USC §112, second paragraph for

insufficient antecedent basis for the claims. The claims have been amended to

- 11 -

comply with 35 USC §112. Withdrawal of the 35 USC §112 rejection of claims 8, 9,

and 12 is respectfully requested.

Claim Rejections - 35 USC §102

Claims 1 and 10 stand rejected under 35 USC §102(e) as being anticipated by

U.S. Patent No. 6,460,154 to Duxbury (hereafter "Duxbury").

The pending claims recite receiving a forward error correction coded block;

receiving a forward error correction code rate; receiving a symbol modulation rate;

decoding the received forward error correction block to produce a decoded block

based on the forward error correction code rate and the symbol modulation rate;

dividing the decoded block into segments; determining if a segment was received

with an error; correcting the segment received with an error using forward error

correction; and requesting retransmission of the segment received with an error

only when the segment received with an error is not correctable. The cited

reference fails to teach the pending claims.

To anticipate a claim, a reference must teach every element of the claim. "A

claim is anticipated only if each and every element as set forth in the claim is found,

either expressly or inherently described, in a single prior art reference." Verdegaal

Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed.

Cir. 1987)." (See MPEP § 2131.) Duxbury fails to disclose at least the element of

- 12 -

**Applicant:** Ferguson et al. **Application No.:** 09/263,358

receiving a forward error correction code rate, a symbol modulation rate; forward error correction decoding the forward error correction block to produce a decoded block based on the forward error correction code rate and the symbol modulation. In contrast to the presently claimed method of varying the FEC rate based on channel conditions, Duxbury discloses the following:

"Connected between the analog interface 20 and the digital interface 25 is a receive section, consisting of a receiver/decoder 21 in series with an error message detector 22, a forward error correction (FEC) decoder 23 and a receiver alignment buffer 24. The modem 1 further comprises a transmit section, also connected between the analog and digital interfaces, comprising a series arrangement of a transmitter alignment buffer 29, an FEC encoder 28, an error message inserter 27 and an encoder/transmitter 26.

The receive and transmit sections are also cross-connected by virtue of the error message detector 22 supplying a "retransmission request" message 15 to the transmitter alignment buffer 29 and the FEC decoder 23 providing an "uncorrectable error" message 16 to the error message inserter 27." (Column 3, line 56 – column 4, line 4).

In Duxbury, a simple FEC coder and retransmission request is disclosed. According to Duxbury, if a transmission is received with an error, and cannot be decoded, a request for retransmission is generated. However, no adaptive techniques in the coding rate responsive to the channel conditions are applied. (See Abstract). Duxbury fails to disclose or remotely suggest a variable rate FEC coder that can adjust to channel conditions.

Applicants therefore believe the pending claims are novel and patentable

over the cited reference. Accordingly, withdrawal of the 35 USC §102(e) rejection of

claims 1 and 10 is respectfully requested.

Claim Rejections - 35 USC §103

Claims 2-4 stand rejected under 35 USC §103(a) as being unpatentable over

Duxbury in view of the Examiner's Official Notice.

Claims 2-4 depend upon claim 1, which Applicants believe is patentable over

Duxbury for the reasons presented above.

Based on the arguments presented above, withdrawal of the 35 USC §103(a)

rejection of claims 2-4 is respectfully requested.

Conclusion

Applicants believe that new claims 13-25 are allowable for the same reasons

set forth above because these claims include the same features that are not taught

by the cited reference.

If the Examiner believes that any additional minor formal matters need to be

addressed in order to place this application in condition for allowance, or that a

telephone interview will help to materially advance the prosecution of this

- 14 -

Applicant: Ferguson et al. **Application No.:** 09/263,358

application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1-25, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Ferguson et al.

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